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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,793	02/25/2002	Yutaka Akiba	16869N-044400US	7870

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EXAMINER

HARPER, HOLLY R

ART UNIT PAPER NUMBER

2879

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/084,793

Applicant(s)

AKIBA, YUTAKA

Examiner

Holly R. Harper

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2879

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Examiner's Note***

There is a typographical error in claim 14. Line 6 says "substrate an said second substrate", but it should read "substrate and said second substrate".

### ***Response to Amendment***

The Amendment, filed on 7/2/2003, has been entered and acknowledged by the Examiner.

Claims 14-31 have been entered.

Claims 1-13 have been canceled.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 14-16 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Amano (USPN 5,371,437).

In regard to claim 14, the Amano reference discloses a plasma display panel with a first substrate (Figure 3, Element 1), a first electrode (Figure 3, Element 17), a second substrate (Figure 3, Element 6), a second electrode (Figure 3, Element 23), a barrier plate between the first

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and second substrate (Figure 3, Elements 19, 20, 21), a cell defined by a region of space bounded by the first substrate, second substrate, and the barrier wall (Figure 3). There is a metal electrode that projects into the cell (Figure 3, Element 20).

In regard to claim 15, the Amano reference discloses that the projection of the metal electrode is formed at a position where it overlies the first electrode (Figure 3).

In regard to claim 16, the Amano reference discloses that the metal electrode has two projections, formed at opposing surfaces of the barrier plate. Each cell has two projections from opposing sides (Figure 3).

In regard to claim 22, the Amano reference discloses a plasma display panel with a front substrate (Figure 3, Element 1), a back substrate (Figure 3, Element 6), and a barrier plate between the front and back substrates (Figure 3, Elements 19, 20, 21). There are a plurality of cells (Figure 3). The front substrate is made of glass (Column 1, Line 55) and has an X electrode (Figure 3, Element 17). The back substrate made of glass (Column 1, Line 57) and has a Y electrode (Figure 3, Element 23). The barrier plate is made of a metal electrode having a projection that projects into an interior region of the cell at a position where the metal electrode crosses the Y electrode (Figure 3).

3. Claim 14-21 and 23-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Yutaka (JP 2000-038166).

In regard to claim 14, the Yukata reference discloses a plasma display panel with a first substrate (Figure 1, Element 6), a first electrode (Figure 1, Element 10), a second substrate (Figure 1, Element 13), a second electrode (Figure 1, Element 15), a barrier plate between the first and second substrate (Figure 1, Element 5), a cell defined by a region of space bounded by

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the first substrate, second substrate, and the barrier wall (Figure 1). There is a metal electrode that projects into the cell (Figure 18).

In regard to claim 15, the Yukata reference discloses that the projection of the metal electrode is formed at a position where it overlies the first electrode (Figure 1 and 18).

In regard to claim 16, the Yukata reference discloses that the metal electrode has two projections, formed at opposing surfaces of the barrier plate. Each cell has two projections from opposing sides (Figure 18).

In regard to claim 17, the Yukata reference discloses a metal electrode with a plurality of layers (Figure 1, Elements 5a, 5b, 5c). At least the first layer of metal has a projection where the metal electrode crosses over the first electrode (Figure 18 and 1).

In regard to claim 18, the Yukata reference discloses a plasma display panel with a first substrate (Figure 1, Element 13), a second substrate (Figure 1, Element 6), a barrier plate between the first and second substrate (Figure 1, Element 5), and a cell defined by a region of space bounded by the first substrate, second substrate, and the barrier wall (Figure 1). The first substrate has an address electrode (Figure 1, Element 15), a first dielectric layer (Figure 1, Element 16), and a first electrode such that it crosses over the address electrode (Figure 1, Element 18). The second substrate has a second electrode (Figure 1, Element 10). The metal electrode has projections where the metal electrode crosses over the first electrode (Figure 18 and 1).

In regard to claim 19, the Yukata reference discloses that the projection of the metal electrode is formed at a position where it overlaps flat with the first electrode (Figure 1 and 18).

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In regard to claim 20, the Yukata reference discloses that the metal electrode has two projections, formed at opposing surfaces of the barrier plate. Each cell has two projections from opposing sides (Figure 18).

In regard to claim 21, the Yukata reference discloses a metal electrode with a plurality of layers (Figure 1, Elements 5a, 5b, 5c). At least the first layer of metal has a projection where the metal electrode crosses over the first electrode (Figure 18 and 1).

In regard to claim 23, the Yukata reference discloses a plasma display panel with a front substrate (Figure 1, Element 6), a back substrate (Figure 1, Element 13), and a barrier plate between the front and back substrates (Figure 1, Element 5). There are a plurality of cells defined by the front substrate, back substrate, and barrier plates (Figure 9). The front substrate has an address electrode (Figure 1, Element 15), a first dielectric layer (Figure 1, Element 16), a first and second electrode formed on the dielectric layer (Figure 1, Elements 18 and 19). The first and second electrodes are in crossed relation to the address electrode. The metal electrode has projections at the position where the metal electrode crosses over one of the first and second electrodes (Figure 18 and 1).

In regard to claim 24, the Yukata reference discloses that the barrier plate has a partition between the first and second electrode and has an inverted U shape (Figure 1).

In regard to claim 25, the Yukata reference discloses that the first and second electrodes are formed alternately and the metal electrode forms a partition between them (Figure 1).

In regard to claim 26, The Yukata reference discloses that the metal electrode ha a projection where the metal electrode crosses over the first and second electrode (Figure 1 and 18).

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In regard to claim 27, the Yukata reference discloses that the metal electrode is made of a plurality of layers (Figure 1, Elements 5a, 5b, 5c) and there is a projection located near the first electrode where the metal electrode crosses over one of the first or second electrodes (Figure 1 and 18).

In regard to claim 28, the Yukata reference discloses that the projection of the metal electrode is formed at a surface of the barrier plate, which forms the side of the cell and faces each other (Figure 18).

In regard to claim 29, the Yukata reference discloses a plasma display panel with a front substrate (Figure 1, Element 6), a back substrate (Figure 1, Element 13), and a barrier plate between the front and back substrates (Figure 1, Element 5). There are a plurality of cells defined by the front substrate, back substrate, and barrier plates (Figure 9). The front substrate has an address electrode (Figure 1, Element 15), an X electrode (Figure 1, Element 18), a Y electrode (Figure 1, Element 19), a first dielectric layer (Figure 1, Element 16), a first and second electrode formed on the dielectric layer (Figure 1, Elements 18 and 19). The front and back substrates are made of glass. The first and second electrodes are in crossed relation to the address electrode. The metal electrode has projections at the position where the metal electrode crosses over one of the X and Y electrodes. There is second projection which projects into the cell where the metal electrode crosses over the Y electrode (Figure 18 and 1).

In regard to claim 30, the Yukata reference discloses that the barrier plate has a partition between the X and Y electrode and has an inverted U shape (Figure 1).

In regard to claim 31, the Yukata reference discloses that the X and Y electrodes are formed alternately and the metal electrode forms a partition between them (Figure 1).

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### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yutaka, Akiba (JP 2000-081699) discloses a metal barrier wall with a protrusion (Figure 1).

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Harper whose telephone number is (703) 305-7908. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Holly Harper  
Patent Examiner  
Art Unit 2879

  
**ASHOK PATEL**  
**PRIMARY EXAMINER**